

State of New Jersey
Department of Environmental Protection
Division of Responsible Party Site Remediation
CN-435
Trenton, New Jersey 08625-0435

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PERMIT APPLICATION INSTRUCTIONS

Introduction

A permit application will be processed expeditiously if it is complete, correct and has the correct fee attached. Please take time, therefore, to read these instructions. We also recommend that you double-check the application before mailing it.

This application has been designed for the most effective Departmental review. Its use will reduce the time needed for the Department to review permit applications and will cut down on the number of deficiency letters. Although this permit appears to be long, only certain parts of it must be completed depending upon the type of system to be installed or substantially upgraded.

The applicant should be familiar with the Code of Federal Regulations, 40 CFR 280 - The Technical Standards and Corrective Requirements for Owners and Operators of Underground Storage Tanks, which took effect on December 23, 1988. They are referenced frequently in this application.

The Department's Authority for Requiring Permits

The Underground Storage of Hazardous Substances Act, N.J.S.A. 58:10A-21, effective September 3, 1986, gives the New Jersey Department of Environmental Protection the authority to promulgate regulations that set standards for the installation and upgrade of Underground Storage Tanks (USTs). The Act also gives the Department the authority to require permits for these installations and upgrades.

Why We Reference the Federal Code in this Application

The Federal Regulations, 40 CFR 280 et seq. instead of the Regulations Implementing the New Jersey Underground Storage of Hazardous Substances Act, N.J.A.C. 7:14B et seq. are cited in this application. As explained in more detail below, the reason we reference 40 CFR 280 is that the Department has not yet amended its regulations.

On April 11, 1994 the New Jersey Senate amended the New Jersey Underground Storage of Hazardous Substances Act. This act, P.L. 1994, Chapter 14, 1994 Senate No. 645 (hereinafter P.L. 1994), changed most of the requirements that were effective prior to this date for the construction, installation and operation of new and existing USTs. The Act required that the Department establish new standards which are not more stringent than those standards adopted by the USEPA for all regulated USTs, with one exception. The Department can establish more stringent standards for USTs located in wellhead protection areas. P.L. 1994 went beyond the Federal Code in another area. Although the Federal Regulations omitted for regulation all heating oil USTs, some of these heating oil USTs were not excluded by P.L. 1994. More information concerning the regulation of heating oil USTs is given in the following sections, "Who needs a Permit" and "Who does not need a Permit".

The Department is currently promulgating new regulations incorporating the extensive changes mandated by P.L. 1994. Pending the issuance of the amended regulations, the Department will use the Federal Regulations, 40 CFR 280, to determine compliance with all technical aspects of new tank installations and substantial upgrade requirements.

Who Needs a Permit

Any person who owns or operates, or is proposing to own or operate, a regulated UST must obtain a permit from the Department prior to replacing, installing, expanding, or substantially modifying the UST system, except for certain types of regulated systems listed in the section entitled "Who does not need a permit".

An underground storage tank is defined as any one or a combination of tanks, including pipes, lines, fixtures, and other related equipment, used to contain an accumulation of hazardous substances, the volume of which, including the volume of the appurtenant pipes, fixtures, and other related equipment, is 10% or more beneath the surface of the ground.

Refer to N.J.A.C. 7:14B-1.4, Applicability, for USTs which are not regulated. If you are in doubt about the applicability of your UST system, contact the Registration and Billing Section at (609)633-0719.

Substantial modifications include many repairs and most upgrades for discharge monitoring systems, corrosion protection, and spill and overflow prevention. A substantial modification is defined as any construction at, or restoration, refurbishment, or renovation of, an existing facility which increases or decreases the in-place storage capacity of the facility or alters the physical integrity of the facility or its monitoring systems. Replacement of the entire length of piping from the dispenser to the tank shall constitute a new installation.

NOTE: Read the following section , "Who Does Not Need a Permit" for specific exemptions of the overall permit requirements.

Who Does Not Need a Permit

- A. The Department exempts from the permitting requirements an owner or operator of an existing or proposed underground storage tank system and neither the owner nor operator need apply for a permit with the Department when:
1. The underground storage tank and piping being installed is protected from corrosion, spills, and overfills in accordance with 40 CFR 280.20 and is secondarily contained and interstitially monitored in accordance with 40 CFR 280.43(g).
 2. The only portion of the tank system being installed is the product piping and the piping is designed and constructed to meet the following standards.
 - i. The piping operates at less than atmospheric pressure;
 - ii. The piping is sloped so that the contents of the pipe will drain back into the storage tank if the suction is released;
 - iii. Only one check valve is included in each suction line;
 - iv. The check valve is located directly below and as close as practical to the suction pump; and
 - v. A method is provided that allows compliance with these requirements to be readily determined.
 3. The only portion of the tank system being installed is the product piping and the piping is protected from corrosion in accordance with 40 CFR 280.20(b)(2)(ii),(iii) and (iv) and is secondarily contained and interstitially monitored in accordance with 40 CFR 280.43(g).
- B. Installation of replacement appurtenant piping sections (new piping is placed where the old piping was removed) does not require a permit as long as the appurtenant piping meets the standards set forth in 40 CFR 280, the entire length of piping from the dispenser to the tank is not being replaced, and the installation does not affect the existing cathodic

protection system. Replacement of the entire length of piping from the dispenser to the tank shall constitute closure of piping and a new installation and requires a permit unless it meets the condition of A above. The closure of the piping requires a closure approval from the Department in accordance N.J.A.C. 7:14A-9.

C. USTs that are not regulated by the Underground Storage of Hazardous Substances Act, N.J.A.C. 7:14B et seq. do not require a permit. These include the following USTs (please refer to N.J.A.C. 7:14B - 2 for a complete listing):

1. USTs used to store heating oil for on-site consumption at nonresidential sites where the aggregate site capacity is equal to or less than 2,000 gallons;
2. **All** USTs used to store heating oil for on-site consumption at residential sites (Note that a "residential building" is defined as a single or multi-family dwelling, nursing home, trailer, condominium, boarding house, apartment house, or other structure designed and used primarily as a dwelling).
3. Tanks used to contain radioactive materials that are regulated under the Atomic Energy Act of 1954.
4. Tanks that are part of an emergency generator system at a Nuclear power generator regulated by the Nuclear Regulatory Commission under 10 CFR 50 Appendix A.

D. A permit is not required for the following operations;

1. installation of vapor control systems required by N.J.A.C. 7:27-16, Control and Prohibition of Air Pollution by Volatile Organic Substances;
2. changing of the tank's contents where the new hazardous substance is chemically compatible with the tank's construction material or tank lining;
3. installation of a line release detector;
4. performance of a "minor repair", that is a repair which does not involve cutting the tank shell, affect any cathodic protection systems, or otherwise affect the storage capacity, physical configuration, or integrity of the facility or its monitoring system;
5. performance of some other operation which will not affect storage capacity, physical configuration, or the physical integrity of the facility or of its monitoring system.

NOTE: for the above USTs which do not need permits from the Department, local construction permits -- pursuant to the New Jersey Uniform Construction Code, N.J.A.C. 5:23 --may be required; contact the local construction code official.

COMPLETING THE APPLICATION

The first three pages of the Permit Application form, UST-010, must be completed by all applicants. Attachment A of the Permit Application must only be completed if a new UST system is to be installed. Attachment B of the Permit Application must be completed only in cases of a substantial modification to an existing UST system. The proper signature pages, certifications and attachments must be completed in all cases. Registration Questionnaires must be submitted to the Billing

and Registration Section within 30 days prior to use of a new UST system and within 7 days after completion of a substantial modification.

Be aware that a permit cannot be issued unless an UST system(s) has or will have each of the following: a release detection system, corrosion protection and spill and overfill prevention equipment. It is not possible, therefore, to apply for a permit for a "partial" upgrade or a major repair by itself when the owner or operator of the UST system(s) has not complied with all of the preceding protective features.

For your convenience, a "Glossary of Technical Terms" is provided at the end of these instructions.

Page-by-Page Guidelines for the Permit Application (UST-010)

Pages 1 through 3 must be completed by all applicants. Although the section is self-explanatory, the following will provide clarification and additional information needed to complete the application.

Permit Activity (4)

A permit is required for each permit activity at each facility that has been issued an UST registration number.

A permit activity means the installation or the substantial modification of new or existing underground storage tank (UST) system(s). Refer to the "Glossary of Technical Terms" for the definition of "new", "existing" or "closed" UST systems.

A permit activity does not depend upon the number of excavations or tanks, but upon the types of activities being performed.

Permits are valid for only **ONE (1)** year. If a permit expires before work has begun, a new permit application must be submitted to the Department.

Examples

- a) Two new UST systems are being installed in the same excavation. One permit application is required.
- b) Two new UST systems are being installed in separate excavations at the same facility. One permit application is required.
- c) A substantial modification to an existing UST system is intended to be done and a new UST system installed in the same excavation or in separate excavations. Both UST systems are to be installed at the same facility. One permit application is required.

Fee Schedule (6)

There is one \$300 fee per application. There are no fee exemptions

The owner or operator may be required to pay a separate fee for resubmissions of the same application or report when the application is disapproved due to technical deficiencies in the initial submittal.

The fees are not one-time fees but rather the fees required to perform the review of the specific submittal to the Department.

Party Responsible for the Construction of the Proposed UST System(8)

Enter the requested information for the party who will construct, install, or modify the UST system.

ATTACHMENT A: NEW INSTALLATION

This section is largely self-explanatory. When completing this section, don't forget to check the appropriate spaces and to complete and include with the application any required attachments.

The following will provide information needed to complete certain sections.

Engineering Plans (I)

Only one copy of the site diagram is required with this application. The diagram required in Attachment A must be signed and sealed by a New Jersey Professional Engineer (PE). A PE who is also certified in accordance with N.J.S.A. 58:10A-24.1-8 must also sign Certificate #1 which is located at the end of this application. That individual must also be employed by a firm certified for Installation.

Tank and Piping Details (III)

Tank I.D. No.

Fill in the Tank I.D. Numbers consistent with those given on the Registration Questionnaire and labeled according to the instructions found on the Registration Questionnaire.

Use

Insert one of the following codes regarding the use or intended use of the UST.

A = to store motor fuel for noncommercial purposes at a farm or residential facility.

B = to store motor fuel for noncommercial purposes at a facility which is not a farm or a residential facility.

C = to store motor fuel for commercial purposes.

D = to store heating oil for on-site consumption at a nonresidential building.

E = to store waste oil.

F = to store hazardous substances (including petroleum products) used in a manufacturing process.

G = other (this includes, but is not limited to, waste water, waste-water sludge, sewage, or a hazardous substance not addressed with the other codes).

Dispensing Systems

Three types of dispensing systems are available:

Pressurized, where the product is "pushed" to the dispenser by a submersible or centrifuge pump and the piping is operated at greater than atmospheric pressure.

Suction, where the product is "pulled" to the dispenser by a suction pump and the piping operates at or below atmospheric pressure. A European-style suction dispensing system is a system where there is only one check valve in each line, located directly below the suction pump, and the piping is sloped back to the tank so that all product drains back into the tank (rather than the environment) in the event suction is lost. The other suction system available is known as American-style. An American-style suction dispensing system is a system where there is a check valve located at the connection between the tank and the product bearing piping.

Cathodic Protection

Refer to the Glossary of these Instructions for information concerning Cathodic Protection Specialist. Indicate if the cathodic protection plan was designed for the entire UST system (i.e. tanks and piping).

Monitoring

When a release detection system is proposed that is classified as "other" in this application, the minimum detectable limit should be expressed as a concentration in terms of the product intended to be stored, not in terms of any other substance.

ATTACHMENT B: EXISTING UST SYSTEMS

This section is also largely self-explanatory. Except for Section 2, Site Diagram, follow the guidance already given above for "New Installations" when completing this section. Don't forget to check the appropriate spaces and to complete and include with the application any required attachments.

GLOSSARY OF TECHNICAL TERMS

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| Anode: | a metal used as an integral component of a cathodic protection system, discharging electric current through soil and to the buried metal to be protected from corrosion. |
| Background contamination: | the pre-existing levels of a substance in the surrounding environment. |
| Boring: | any hole that is not cased which was drilled or otherwise constructed for the purpose of obtaining engineering, geophysical, and/or hydrogeological data. |
| Cathodic Protection: | a technique of controlling electric currents in buried metal and the surrounding soil in order to prevent corrosion. |
| Cathodic Protection Specialist Certification: | a certification issued by the State of New Jersey that includes any and all activities relative to the on-site design, installation, maintenance and testing of corrosion protection systems for underground storage tank systems that are regulated by the New Jersey Underground Storage of Hazardous Substances Act, N.J.A.C. 7:14B <u>et seq.</u> |
| Cathodic Protection Testing Certification: | a certification issued by the State of New Jersey that includes any and all activities relative to the testing of corrosion protection systems for underground storage tank systems that are regulated by the New Jersey Underground Storage of Hazardous Substances Act, N.J.A.C. 7:14B <u>et seq.</u> |
| Closed UST System: | a closed UST system is an UST system that has been permanently eliminated from service by removal or abandonment in place. |
| Detection limit: | the lowest level of a substance which can be observed using a particular analytical method. |
| Dielectric coating: | a coating which can be applied to metal UST systems to reduce the metal surface area exposed to soil and susceptible to corrosion. |
| Discharge: | any release from an underground storage tank system into the environment. |
| Existing UST System: | an UST system for which installation commenced on or before September 4, 1990 and which is not closed pursuant for N.J.A.C. 7:14B. Installation is considered to have commenced if: |

1. the owner or operator has obtained all federal, state, and local approvals or permits necessary to begin physical construction of the site or installation of the tank system; and if,

i. a continuous on-site physical construction or installation program has begun; or,

ii. the owner or operator has entered into contractual obligation which cannot be canceled or modified without substantial loss. The contractual obligations shall be for physical construction at the site or installation of the tank system which shall be completed within a reasonable time.

Hazardous Substances:

"hazardous substances" mean:

1. motor fuel;

2. petroleum products which are liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute);

3. the hazardous wastes designated pursuant to :

i. Section 3001 of the Resource Conservation and Recovery Act of 1976, Publication L. 94-580 (42 U.S.C. 6921); and

ii. N.J.A.C. 7:26-8;

4. the hazardous substances designated pursuant to:

i. Section 311 of the Federal Water Pollution Control Act Amendments of 1972, Publication L. 92-500 (33 U.S.C. 1321);

ii. Section 101(14) of the Comprehensive Environmental, Response, Compensation and Liability Act of 1980, Publication L. 96-150 (U.S.C. 9601);

iii. The Spill Compensation and Control Act, N.J.S.A. 58:10-23.11 et seq.; and

5. the toxic pollutants designated pursuant to Section 307 of the Federal Water Pollution Control Act Amendments of 1972, Publication L. 92-500 (33 U.S.C. 1317).

Heating oil:

any grade of petroleum product including, but not limited to, Nos. 1, 2, 4 (light and heavy), 5 (light and heavy) and 6 fuel oils, diesel, and kerosene of any grade or type used to heat industrial or commercial premises.

Hydraulic conductivity (K):

the rate at which water will flow through a porous medium.

Immiscible:

two or more liquids that cannot dissolve completely in one another.

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| Impressed current cathodic protection: | a type of cathodic protection for which an external power source supplies current to buried anodes. |
| Installation Certification: | a certification issued by the State of New Jersey that includes all activities pertaining to the installation of underground storage tanks, associated piping and appurtenant equipment for complying with the New Jersey Underground Storage of Hazardous Substances Act, N.J.A.C. 7:14A <u>et seq.</u> Persons holding an installation certification will also be considered to hold a release detection monitoring system certification. Installation activities shall also include any maintenance or repair of any part of the underground storage tank system performed by a person or company who is not the owner or operator of the tank system. The owner or operator or a permanent employee of the owner or operator may perform maintenance or repair activities covered by this Act only if the individual is certified. However the owner or operator does not need to obtain firm certification. |
| In-tank monitoring: | a volumetric inventory control method and discharge detection method. |
| Interstitial Space: | the space between the primary container and the secondary container (an example is the annular space between the two walls of a double-walled tank). |
| Leak: | the release of a hazardous substance from an underground storage tank system into the interstitial space. |
| New UST System: | an UST system which is not an existing or closed UST system. |
| Permeable: | the ability of a rock or soil to transmit fluid. |
| Permit: | as used in this application, an authorization to install or substantially modify an Underground Storage Tank System. |
| Petroleum Substance: | crude oil, any substance made of crude oil, or any fraction of such substances that is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute). Petroleum substances include those containing motor fuels, jet fuel, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, and used oil. |
| Release Detection System Installation Certification: | a Certificate issued by the State of New Jersey that includes all activities associated with the installation and maintenance of release detection monitoring systems, excluding activities for which a New Jersey Well Driller's License is required. |
| Release: | a leak or a discharge. |
| Remote fill port: | a fill port which is not connected vertically to an underground storage tank but is connected to the underground storage tank by horizontal or near-horizontal bearing piping. |

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| Seasonal high water table: | the highest yearly surface on which the fluid pressure in the pores of a porous medium is exactly atmospheric. The highest yearly boundary between the saturated and the unsaturated zone. |
| Soil gas (or soil vapor): | vapors in the soil, measurable by field instruments and/or laboratory analysis. |
| Specific gravity: | the ratio of the weight of a given volume of a substance to the weight of an equal volume of water. |
| Striker plate: | a plate located on the inside of an underground storage tank, directly below the fill port, used to prevent a gauging stick from causing localized internal corrosion and/or from puncturing the bottom of the tank. |
| Subsurface Evaluation Certification: | a certification issued by the State of New Jersey that includes all activities pertaining to site assessment for tank closure, corrective action and selection of release detection monitoring systems. |
| Surface Water Body: | a natural or man made body of water which includes, but is not limited to, streams, rivers, reservoirs, ponds, lakes, oceans, estuaries and wetlands. |
| Tank Testing Certification: | a Certification issued by the State of New Jersey that includes all activities relative to testing the physical integrity of an underground storage tank and appurtenant piping regulated by the New Jersey Underground Storage of Hazardous Substances Act from inception of the test until removal of testing apparatus from the tank system. This does not include air-pressure soap tests of tanks or piping. |
| Tracer compound: | a highly volatile substance added to an underground storage tank and mixed with a stored product, which will then be transported with the product upon any releases and will be detectable outside the tank by vapor analysis. |
| Volatility: | the tendency of a substance to evaporate. |
| Water table: | the surface of the body of unconfined water where the hydrostatic pressure is equal to atmospheric pressure. The water table is the boundary between the saturated and the unsaturated zone. |